

Robin S Shandas

List of Publications by Year in descending order

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148
papers

5,841
citations

87888

38
h-index

85541

71
g-index

155
all docs

155
docs citations

155
times ranked

5686
citing authors

#	ARTICLE	IF	CITATIONS
1	Injectable Polymeric Delivery System for Spatiotemporal and Sequential Release of Therapeutic Proteins To Promote Therapeutic Angiogenesis and Reduce Inflammation. ACS Biomaterials Science and Engineering, 2020, 6, 1217-1227.	5.2	28
2	An injectable sulfonated reversible thermal gel for therapeutic angiogenesis to protect cardiac function after a myocardial infarction. Journal of Biological Engineering, 2019, 13, 6.	4.7	19
3	Gold Nanoparticle-Functionalized Reverse Thermal Gel for Tissue Engineering Applications. ACS Applied Materials & Interfaces, 2019, 11, 18671-18680.	8.0	47
4	Microgrooves Encourage Endothelial Cell Adhesion and Organization on Shape-Memory Polymer Surfaces. ACS Applied Bio Materials, 2019, 2, 1897-1906.	4.6	11
5	Structural and Biomechanical Adaptations of Right Ventricular Remodeling in Pulmonary Arterial Hypertension Reduces Left Ventricular Rotation During Contraction: A Computational Study. Journal of Biomechanical Engineering, 2019, 141, .	1.3	9
6	Measurement of Wall Shear Stress Exerted by Flowing Blood in the Human Carotid Artery: Ultrasound Doppler Velocimetry and Echo Particle Image Velocimetry. Ultrasound in Medicine and Biology, 2018, 44, 1392-1401.	1.5	34
7	Development of an electrospun biomimetic polyurea scaffold suitable for vascular grafting. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2018, 106, 278-290.	3.4	10
8	A sulfonated reversible thermal gel for the spatiotemporal control of VEGF delivery to promote therapeutic angiogenesis. Journal of Biomedical Materials Research - Part A, 2018, 106, 3053-3064.	4.0	15
9	Left ventricular torsion rate and the relation to right ventricular function in pediatric pulmonary arterial hypertension. Pulmonary Circulation, 2018, 8, 1-10.	1.7	10
10	Echo Particle Image Velocimetry for Estimation of Carotid Artery Wall Shear Stress: Repeatability, Reproducibility and Comparison with Phase-Contrast Magnetic Resonance Imaging. Ultrasound in Medicine and Biology, 2017, 43, 1618-1627.	1.5	16
11	Injectable Carbon Nanotube-Functionalized Reverse Thermal Gel Promotes Cardiomyocytes Survival and Maturation. ACS Applied Materials & Interfaces, 2017, 9, 31645-31656.	8.0	52
12	Circulating miRNAs in Pediatric Pulmonary Hypertension Show Promise as Biomarkers of Vascular Function. Oxidative Medicine and Cellular Longevity, 2017, 2017, 1-11.	4.0	16
13	Shape Memory Polymers Containing Higher Acrylate Content Display Increased Endothelial Cell Attachment. Polymers, 2017, 9, 572.	4.5	7
14	A Zero-Dimensional Model and Protocol for Simulating Patient-Specific Pulmonary Hemodynamics From Limited Clinical Data. Journal of Biomechanical Engineering, 2016, 138, .	1.3	7
15	Analysis of pediatric airway morphology using statistical shape modeling. Medical and Biological Engineering and Computing, 2016, 54, 899-911.	2.8	8
16	Biomimetic Polymers for Cardiac Tissue Engineering. Biomacromolecules, 2016, 17, 1593-1601.	5.4	37
17	Main Pulmonary Arterial Wall Shear Stress Correlates with Invasive Hemodynamics and Stiffness in Pulmonary Hypertension. Pulmonary Circulation, 2016, 6, 37-45.	1.7	48
18	Vorticity is a Marker of Diastolic Ventricular Interdependency in Pulmonary Hypertension. Pulmonary Circulation, 2016, 6, 46-54.	1.7	26

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19	Characterization of CMR-derived haemodynamic data in children with pulmonary arterial hypertension. <i>European Heart Journal Cardiovascular Imaging</i> , 2016, 18, jew152.	1.2	24
20	4D magnetic resonance flow imaging for estimating pulmonary vascular resistance in pulmonary hypertension. <i>Journal of Magnetic Resonance Imaging</i> , 2016, 44, 914-922.	3.4	34
21	Non-invasive determination by cardiovascular magnetic resonance of right ventricular-vascular coupling in children and adolescents with pulmonary hypertension. <i>Journal of Cardiovascular Magnetic Resonance</i> , 2015, 17, 81.	3.3	31
22	Assessment of N-terminal Prohormone B-type Natriuretic Peptide as a Measure of Vascular and Ventricular Function in Pediatric Pulmonary Arterial Hypertension. <i>Pulmonary Circulation</i> , 2015, 5, 658-666.	1.7	10
23	A heparin-mimicking reverse thermal gel for controlled delivery of positively charged proteins. <i>Journal of Biomedical Materials Research - Part A</i> , 2015, 103, 2102-2108.	4.0	17
24	Characterization of micro-invasive trabecular bypass stents by ex vivo perfusion and computational flow modeling. <i>Clinical Ophthalmology</i> , 2014, 8, 499.	1.8	37
25	Extubation force depends upon angle of force application and fixation technique: a study of 7 methods. <i>BMC Anesthesiology</i> , 2014, 14, 74.	1.8	14
26	The design and fabrication of two portal vein flow phantoms by different methods. <i>Medical Physics</i> , 2014, 41, 023701.	3.0	5
27	Biocompatibility and tissue integration of a novel shape memory surgical mesh for ventral hernia: In vivo animal studies. <i>Journal of Biomedical Materials Research - Part B Applied Biomaterials</i> , 2014, 102, 1093-1100.	3.4	12
28	A Survey of Surface Modification Techniques for Next-Generation Shape Memory Polymer Stent Devices. <i>Polymers</i> , 2014, 6, 2309-2331.	4.5	71
29	Hydrogel formulation determines cell fate of fetal and adult neural progenitor cells. <i>Stem Cell Research</i> , 2014, 12, 11-23.	0.7	31
30	A Novel Microfluidic Chip for Assessing Dynamic Adhesion Behavior of Cell-Targeting Microbubbles. <i>Ultrasound in Medicine and Biology</i> , 2014, 40, 148-157.	1.5	8
31	Mesoporous silica nanoparticles as a breast-cancer targeting ultrasound contrast agent. <i>Colloids and Surfaces B: Biointerfaces</i> , 2014, 116, 652-657.	5.0	107
32	Patient-Specific Imaging-Based Techniques for Optimization of Pediatric Cardiovascular Surgery. , 2014, , 3471-3490.		0
33	Wall shear stress measured by phase contrast cardiovascular magnetic resonance in children and adolescents with pulmonary arterial hypertension. <i>Journal of Cardiovascular Magnetic Resonance</i> , 2013, 15, 81.	3.3	57
34	Paclitaxel-liposome-microbubble complexes as ultrasound-triggered therapeutic drug delivery carriers. <i>Journal of Controlled Release</i> , 2013, 166, 246-255.	9.9	213
35	An investigation of industrial molding compounds for use in 3D ultrasound, MRI, and CT imaging phantoms. <i>Medical Physics</i> , 2013, 40, 052905.	3.0	15
36	High pulsatility flow stimulates smooth muscle cell hypertrophy and contractile protein expression. <i>American Journal of Physiology - Lung Cellular and Molecular Physiology</i> , 2013, 304, L70-L81.	2.9	49

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37	Fabrication and Characterization of Novel High Modulus, Two-Stage Reactive Thiol-Acrylate Composite Polymer Systems. <i>Macromolecular Symposia</i> , 2013, 329, 101-107.	0.7	13
38	Integrating a novel shape memory polymer into surgical meshes decreases placement time in laparoscopic surgery: An <i>in vitro</i> and acute <i>in vivo</i> study. <i>Journal of Biomedical Materials Research - Part A</i> , 2013, 101A, 2613-2620.	4.0	16
39	Influence of Distal Resistance and Proximal Stiffness on Hemodynamics and RV Afterload in Progression and Treatments of Pulmonary Hypertension: A Computational Study with Validation Using Animal Models. <i>Computational and Mathematical Methods in Medicine</i> , 2013, 2013, 1-12.	1.3	16
40	A Novel Cationic Microbubble Coated with Stearic Acid-Modified Polyethylenimine to Enhance DNA Loading and Gene Delivery by Ultrasound. <i>PLoS ONE</i> , 2013, 8, e76544.	2.5	29
41	Mechanics and Function of the Pulmonary Vasculature: Implications for Pulmonary Vascular Disease and Right Ventricular Function. , 2012, 2, 295-319.		61
42	Ultrasonic Imaging of Endothelial CD81 Expression Using CD81-Targeted Contrast Agents in <i>In Vitro</i> and <i>In Vivo</i> Studies. <i>Ultrasound in Medicine and Biology</i> , 2012, 38, 670-680.	1.5	16
43	Impact of pulmonary vascular stiffness and vasodilator treatment in pediatric pulmonary hypertension: 21 patient-specific fluid-structure interaction studies. <i>Computer Methods and Programs in Biomedicine</i> , 2012, 108, 617-628.	4.7	18
44	A new flow co-culture system for studying mechanobiology effects of pulse flow waves. <i>Cytotechnology</i> , 2012, 64, 649-666.	1.6	20
45	Two-Stage Reactive Polymer Network Forming Systems. <i>Advanced Functional Materials</i> , 2012, 22, 1502-1510.	14.9	127
46	Development of a Minimally Invasive, Injectable, Shape Memory Suture and Delivery System. <i>Annals of Biomedical Engineering</i> , 2012, 40, 1520-1529.	2.5	10
47	Impact of Residual Stretch and Remodeling on Collagen Engagement in Healthy and Pulmonary Hypertensive Calf Pulmonary Arteries at Physiological Pressures. <i>Annals of Biomedical Engineering</i> , 2012, 40, 1419-1433.	2.5	20
48	Enhanced two-stage reactive polymer network forming systems. <i>Polymer</i> , 2012, 53, 2429-2434.	3.8	38
49	Pulmonary Vascular Stiffness: Measurement, Modeling, and Implications in Normal and Hypertensive Pulmonary Circulations. , 2011, 1, 1413-1435.		43
50	Microstructural Changes in Collagen and Elastin and Their Impact on the Mechanics of the Pulmonary Artery in Hypertension. , 2011, , .		0
51	In Vitro and Preliminary In Vivo Validation of Echo Particle Image Velocimetry in Carotid Vascular Imaging. <i>Ultrasound in Medicine and Biology</i> , 2011, 37, 450-464.	1.5	84
52	Real-Time Texture Analysis for Identifying Optimum Microbubble Concentration in 2-D Ultrasonic Particle Image Velocimetry. <i>Ultrasound in Medicine and Biology</i> , 2011, 37, 1280-1291.	1.5	19
53	A Microstructurally Driven Model for Pulmonary Artery Tissue. <i>Journal of Biomechanical Engineering</i> , 2011, 133, 051002.	1.3	32
54	Linked opening angle and histological and mechanical aspects of the proximal pulmonary arteries of healthy and pulmonary hypertensive rats and calves. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2011, 301, H1810-H1818.	3.2	14

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55	Nucleus Replacement Device Failure. <i>Spine</i> , 2010, 35, E1241-E1247.	2.0	12
56	Conduit Arteries In The Rat And Calf Express Different Material Property Changes In Response To Hypoxia-Induced Pulmonary Hypertension. , 2010, , .		1
57	Quantification of Hemodynamic Wall Shear Stress in Patients with Bicuspid Aortic Valve Using Phase-Contrast MRI. <i>Annals of Biomedical Engineering</i> , 2010, 38, 788-800.	2.5	163
58	Effects of thermal rates on the thermomechanical behaviors of amorphous shape memory polymers. <i>Mechanics of Time-Dependent Materials</i> , 2010, 14, 219-241.	4.4	75
59	Computational simulation of the pulmonary arteries and its role in the study of pediatric pulmonary hypertension. <i>Progress in Pediatric Cardiology</i> , 2010, 30, 63-69.	0.4	16
60	Photopolymerized thiol-ene systems as shape memory polymers. <i>Polymer</i> , 2010, 51, 4383-4389.	3.8	124
61	In vivo measurement of proximal pulmonary artery elastic modulus in the neonatal calf model of pulmonary hypertension: development and ex vivo validation. <i>Journal of Applied Physiology</i> , 2010, 108, 968-975.	2.5	42
62	Measurement uncertainty in pulmonary vascular input impedance and characteristic impedance estimated from pulsed-wave Doppler ultrasound and pressure: clinical studies on 57 pediatric patients. <i>Physiological Measurement</i> , 2010, 31, 729-748.	2.1	6
63	Direct echo PIV flow vector mapping on ultrasound DICOM images. , 2010, , .		1
64	Effect of Vessel Stiffening and High Pulsatility Flow on Contractile Function and Proliferation of Small Arterial Cells. , 2010, , .		0
65	Constitutive Modeling of Anisotropic Finite-Deformation Hyperelastic Behaviors of Soft Materials Reinforced by Tortuous Fibers. , 2010, 2, 19-29.		1
66	In Vivo Validation of Echo Partical Image Velocimetry (Echo PIV) in Human Carotid Arteries Using Phase-Contrast MRI. , 2009, , .		2
67	Wave scattering from encapsulated microbubbles subject to high-frequency ultrasound: Contribution of higher-order scattering modes. <i>Journal of the Acoustical Society of America</i> , 2009, 126, 1766-1775.	1.1	9
68	Effects of Pathological Flow on Pulmonary Artery Endothelial Production of Vasoactive Mediators and Growth Factors. <i>Journal of Vascular Research</i> , 2009, 46, 561-571.	1.4	63
69	Influence of Distal Resistance and Proximal Vascular Stiffness on Vascular Impedance and Hemodynamics in Pulmonary Hypertension: A Computational Study With Validation Using an Animal Model. , 2009, , .		0
70	High Pulsatility Flow Induces Adhesion Molecule and Cytokine mRNA Expression in Distal Pulmonary Artery Endothelial Cells. <i>Annals of Biomedical Engineering</i> , 2009, 37, 1082-1092.	2.5	93
71	Capacitive micromachined ultrasonic transducers using commercial multi-user MUMPs process: Capability and limitations. <i>Ultrasonics</i> , 2009, 49, 765-773.	3.9	18
72	An Artificial Right Ventricle for Failing Fontan: In Vitro and Computational Study. <i>Annals of Thoracic Surgery</i> , 2009, 88, 170-176.	1.3	56

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73	Quantification of Elastin Residual Stretch in Fresh Artery Tissue: Impact on Artery Material Properties and Pulmonary Hypertension Pathophysiology. , 2009, , .		0
74	Measurement of Valve Lesion Morphology and Aorta / Flow-Jet Patterns in Bicuspid Aortic Valve Patients. , 2009, , .		0
75	Strong, Tailored, Biocompatible Shape-Memory Polymer Networks. <i>Advanced Functional Materials</i> , 2008, 18, 2428-2435.	14.9	321
76	Finite deformation thermo-mechanical behavior of thermally induced shape memory polymers. <i>Journal of the Mechanics and Physics of Solids</i> , 2008, 56, 1730-1751.	4.8	357
77	Noninvasive Methods for Determining Pulmonary Vascular Function in Children with Pulmonary Arterial Hypertension: Application of a Mechanical Oscillator Model. <i>Congenital Heart Disease</i> , 2008, 3, 106-116.	0.2	6
78	Pulmonary vascular input impedance is a combined measure of pulmonary vascular resistance and stiffness and predicts clinical outcomes better than pulmonary vascular resistance alone in pediatric patients with pulmonary hypertension. <i>American Heart Journal</i> , 2008, 155, 166-174.	2.7	142
79	Changes in the structure-function relationship of elastin and its impact on the proximal pulmonary arterial mechanics of hypertensive calves. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2008, 295, H1451-H1459.	3.2	127
80	Systematic validation of the echo particle image velocimetry technique using a patient specific carotid bifurcation model. , 2008, , .		2
81	Development of a custom-designed echo particle image velocimetry system for multi-component hemodynamic measurements: system characterization and initial experimental results. <i>Physics in Medicine and Biology</i> , 2008, 53, 1397-1412.	3.0	58
82	Validation of a Second-Generation Echo PIV System in Patient-Specific Carotid Artery Models: In Vitro Studies Using Pulsatile Flow. , 2008, , .		0
83	Effect of Vascular Stiffness on Pulmonary Flow in Normotensive and Hypertensive States: Numerical Study With Fluid Structure Interaction. , 2008, , .		0
84	Abstract 4388: In-Vivo Pulmonary Vascular Stiffness Obtained from Color M-Mode Tissue Doppler Imaging and Pressure Measurements Predicts Clinical Outcomes Better than Indexed Pulmonary Vascular Resistance in Pediatric Patients with Pulmonary Arterial Hypertension. <i>Circulation</i> , 2008, 118, .	1.6	3
85	Application of A Microstructural Constitutive Model of the Pulmonary Artery to Patient-Specific Studies: Validation and Effect of Orthotropy. <i>Journal of Biomechanical Engineering</i> , 2007, 129, 193-201.	1.3	18
86	Thermomechanical indentation of shape memory polymers. , 2007, , .		2
87	Comparison of mechanical behavior among the extrapulmonary arteries from rats. <i>Journal of Biomechanics</i> , 2007, 40, 812-819.	2.1	18
88	Computational fluid dynamics analysis of microbubble formation in microfluidic flow-focusing devices. <i>Microfluidics and Nanofluidics</i> , 2007, 3, 195-206.	2.2	36
89	Unconstrained recovery characterization of shape-memory polymer networks for cardiovascular applications. <i>Biomaterials</i> , 2007, 28, 2255-2263.	11.4	536
90	A Comparative Study of Mechanical Properties of Fresh and Elastic-Network Only Proximal Artery Tissues. , 2007, , .		0

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91	An Implantable Transit-Time Aortic Flow Probe Using Capacitive Micromachined Ultrasound Transducers: Design and Optimization. , 2007, , .		0
92	Patient-Specific Fluid Structure Interaction Simulation Applied to Evaluating Hemodynamics Within the Total Cavopulmonary Connection. , 2007, , .		0
93	Real-Time Measurement of Multi-Component Velocity Vectors Within Abdominal Aortic Aneurysms Using Echo PIV: Comparison of In Vitro and Computational Results. , 2007, , .		0
94	Use of Cardiac Phase-Contrast MRI to Examine Hemodynamics and Wall Deformation Within the Aortic Root for Patients With Bicuspid Aortic Valves. , 2007, , .		0
95	Measurement of In-Vivo Pulmonary Vascular Impedance in Two Animal Models of Pulmonary Hypertension. , 2007, , .		0
96	Addition of Particle Tracking Techniques to Improve Two-Dimensional Echo PIV for Opaque Flow Measurement. , 2007, , .		0
97	Contribution of Elastin to the Mechanical Properties of Arterial Tissues. , 2007, , .		0
98	Use of Myocardial Performance Index in Pediatric Patients with Idiopathic Pulmonary Arterial Hypertension. Journal of the American Society of Echocardiography, 2006, 19, 21-27.	2.8	57
99	Noninvasive Doppler Tissue Measurement of Pulmonary Artery Compliance in Children with Pulmonary Hypertension. Journal of the American Society of Echocardiography, 2006, 19, 403-412.	2.8	48
100	Initial Experience With the Development and Numerical and In Vitro Studies of A Novel Low-Pressure Artificial Right Ventricle for Pediatric Fontan Patients. ASAIO Journal, 2006, 52, 682-692.	1.6	20
101	Efficiency differences in computational simulations of the total cavo-pulmonary circulation with and without compliant vessel walls. Computer Methods and Programs in Biomedicine, 2006, 81, 220-227.	4.7	18
102	Simulations of Congenital Septal Defect Closure and Reactivity Testing in Patient-Specific Models of the Pediatric Pulmonary Vasculature: A 3D Numerical Study With Fluid-Structure Interaction. Journal of Biomechanical Engineering, 2006, 128, 564-572.	1.3	40
103	Theoretical predictions of harmonic generation from submicron ultrasound contrast agents for nonlinear biomedical ultrasound imaging. Physics in Medicine and Biology, 2006, 51, 557-573.	3.0	21
104	Predicting backscatter characteristics from micron- and submicron-scale ultrasound contrast agents using a size-integration technique. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2006, 53, 639-644.	3.0	19
105	Real time multicomponent echo particle image velocimetry technique for opaque flow imaging. Applied Physics Letters, 2006, 88, 261915.	3.3	69
106	Tailored Nanoscale Contrast Agents for Magnetic Resonance Imaging. , 2005, , 581.		0
107	Thermomechanics of the shape memory effect in polymers for biomedical applications. Journal of Biomedical Materials Research - Part A, 2005, 73A, 339-348.	4.0	301
108	Computational simulations of the total cavo-pulmonary connection: insights in optimizing numerical solutions. Medical Engineering and Physics, 2005, 27, 135-146.	1.7	26

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109	Advantages in using multifrequency excitation of contrast microbubbles for enhancing echo particle image velocimetry techniques: Initial numerical studies using rectangular and triangular waves. <i>Ultrasound in Medicine and Biology</i> , 2005, 31, 99-108.	1.5	35
110	A Microstructural Hyperelastic Model of Pulmonary Arteries Under Normo- and Hypertensive Conditions. <i>Annals of Biomedical Engineering</i> , 2005, 33, 1042-1052.	2.5	43
111	Aortic Input Impedance Increases With Age in Healthy Men and Women. <i>Hypertension</i> , 2005, 45, 1101-1106.	2.7	20
112	Free Recovery Effects of Shape-Memory Polymers for Cardiovascular Stents. <i>Materials Research Society Symposia Proceedings</i> , 2005, 898, 1.	0.1	1
113	Optimizing the Thermomechanics of Shape-Memory Polymers for Biomedical Applications. <i>Materials Research Society Symposia Proceedings</i> , 2004, 855, 99.	0.1	0
114	Extraction of Pulmonary Vascular Compliance, Pulmonary Vascular Resistance, and Right Ventricular Work From Single-Pressure and Doppler Flow Measurements in Children With Pulmonary Hypertension: a New Method for Evaluating Reactivity. <i>Circulation</i> , 2004, 110, 2609-2617.	1.6	69
115	Characterizing Vortex Ring Behavior During Ventricular Filling with Doppler Echocardiography: An in Vitro Study. <i>Annals of Biomedical Engineering</i> , 2004, 32, 245-256.	2.5	34
116	Noninvasive Measurement of Steady and Pulsating Velocity Profiles and Shear Rates in Arteries Using Echo PIV: In Vitro Validation Studies. <i>Annals of Biomedical Engineering</i> , 2004, 32, 1067-1076.	2.5	61
117	Development and validation of echo PIV. <i>Experiments in Fluids</i> , 2004, 36, 455-462.	2.4	167
118	Numerical modeling of microbubble backscatter to optimize ultrasound particle image velocimetry imaging: initial studies. <i>Ultrasonics</i> , 2004, 42, 1111-1121.	3.9	36
119	Dynamic three-dimensional reconstruction and modeling of cardiovascular anatomy in children with congenital heart disease using biplane angiography. <i>Biomedical Sciences Instrumentation</i> , 2004, 40, 200-5.	0.2	6
120	Stress and strain in rat pulmonary artery material during a biaxial bubble test. <i>Biomedical Sciences Instrumentation</i> , 2004, 40, 303-8.	0.2	3
121	Comparison of In Vitro Velocity Measurements in a Scaled Total Cavopulmonary Connection with Computational Predictions. <i>Annals of Biomedical Engineering</i> , 2003, 31, 810-822.	2.5	26
122	Insights into the effect of aortic compliance on Doppler diastolic flow patterns seen in coarctation of the aorta: A numeric study. <i>Journal of the American Society of Echocardiography</i> , 2003, 16, 162-169.	2.8	26
123	Influence of Connection Geometry and SVC-IVC Flow Rate Ratio on Flow Structures within the Total Cavopulmonary Connection: A Numerical Study. <i>Journal of Biomechanical Engineering</i> , 2002, 124, 364-377.	1.3	52
124	Use of intravascular ultrasound to measure local compliance of the pediatric pulmonary artery: In vitro studies. <i>Journal of the American Society of Echocardiography</i> , 2002, 15, 1507-1514.	2.8	15
125	Effect of Vessel Size on the Flow Efficiency of the Total Cavopulmonary Connection: In Vitro Studies. <i>Pediatric Cardiology</i> , 2002, 23, 171-177.	1.3	17
126	Reverse flow in compliant vessels and its implications for the Fontan procedure: numerical studies. <i>Biomedical Sciences Instrumentation</i> , 2002, 38, 321-6.	0.2	6

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127	Development of A Noninvasive Ultrasound Color M-Mode Means of Estimating Pulmonary Vascular Resistance in Pediatric Pulmonary Hypertension. <i>Circulation</i> , 2001, 104, 908-913.	1.6	48
128	Artificial Neural Network-Based Method of Screening Heart Murmurs in Children. <i>Circulation</i> , 2001, 103, 2711-2716.	1.6	132
129	Left Ventricular Filling Dynamics: Particle Image Velocimetry and Ultrasound Color M-Mode Imaging. , 2001, , .		0
130	Accuracy of the Bernoulli Equation for Estimation of Pressure Gradient Across Stenotic Blalock-Taussig Shunts: An In Vitro and Numerical Study. <i>Pediatric Cardiology</i> , 2000, 21, 439-447.	1.3	24
131	A Method for Determining the Reference Effective Flow Areas for Mechanical Heart Valve Prostheses. <i>Circulation</i> , 2000, 101, 1953-1959.	1.6	15
132	Pressure recovery and aortic stenosis. <i>Journal of the American College of Cardiology</i> , 2000, 35, 260.	2.8	0
133	Insights into catheter/doppler discrepancies in congenital aortic stenosis. <i>American Journal of Cardiology</i> , 1999, 83, 1447-1450.	1.6	18
134	Real-Time 3-Dimensional Volumetric Ultrasound Imaging of the Vena Contracta for Stenotic Valves with the Use of Echocardiographic Contrast Imaging: In Vitro Pulsatile Flow Studies. <i>Journal of the American Society of Echocardiography</i> , 1999, 12, 541-550.	2.8	7
135	Utility of Three-Dimensional Ultrasound Doppler Flow Reconstruction of the Proximal Jet to Quantify Effective Orifice Area: In Vitro Steady and Pulsatile Flow Studies. <i>Journal of the American Society of Echocardiography</i> , 1998, 11, 313-321.		27
136	Analysis of the Effect of Flow Rate on the Doppler Continuity Equation for Stenotic Orifice Area Calculations. <i>Circulation</i> , 1998, 97, 1597-1605.	1.6	71
137	Requirement for accurate measurement of regurgitant stroke volume by the combined continuous-wave Doppler and color Doppler flow convergence method. <i>American Heart Journal</i> , 1997, 133, 19-28.	2.7	7
138	Color flow Doppler determination of transmitral flow and orifice area in mitral stenosis: Experimental evaluation of the proximal flow-convergence method. <i>American Heart Journal</i> , 1995, 129, 114-123.	2.7	29
139	Nature of flow acceleration into a finite-sized orifice: Steady and pulsatile flow studies on the flow convergence region using simultaneous ultrasound Doppler flow mapping and laser Doppler velocimetry. <i>Journal of the American College of Cardiology</i> , 1995, 25, 1199-1212.	2.8	26
140	Factors influencing pulmonary venous flow velocity patterns in mitral regurgitation: An in vitro study. <i>Journal of the American College of Cardiology</i> , 1995, 26, 1333-1339.	2.8	16
141	Estimation of regurgitant flow volume based on centerline velocity/distance profiles using digital color M-Q Doppler: Application to orifices of different shapes. <i>Journal of the American College of Cardiology</i> , 1994, 24, 440-445.	2.8	21
142	Accuracy of flow convergence estimates of mitral regurgitant flow rates obtained by use of multiple color flow Doppler M-mode aliasing boundaries: An experimental animal study. <i>American Heart Journal</i> , 1993, 125, 449-458.	2.7	37
143	Cine magnetic resonance imaging and color Doppler flow mapping displays of flow velocity, spatial acceleration, and jet formation: A comparative in vitro study. <i>American Heart Journal</i> , 1993, 126, 1165-1173.	2.7	15
144	Effects of adjacent surfaces of different shapes on regurgitant jet sizes: An in vitro study using color Doppler imaging and laser-illuminated dye visualization. <i>Journal of the American College of Cardiology</i> , 1993, 22, 1522-1529.	2.8	15

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145	Experimental Studies to Define the Geometry of the Flow Convergence Region: Laser Doppler Particle Tracking and Color Doppler Imaging. Echocardiography, 1992, 9, 43-50.	0.9	48
146	Flow convergence calculations of flow rate through non or minimally restrictive orifices: In-vitro studies. Journal of the American College of Cardiology, 1991, 17, A359.	2.8	5
147	A new automatic computer method for measuring mean flow convergence radius from color MQ modes provides more accurate flow rate estimates: In-vitro and animal studies of mitral regurgitation. Journal of the American College of Cardiology, 1991, 17, A149.	2.8	9
148	Accuracy of flow convergence methods for calculating mitral regurgitant flow: Validation studies in an animal model. Journal of the American College of Cardiology, 1990, 15, A110.	2.8	12